# Quiz 6



**Instructions**: Legibly complete each of the following on lined paper and submit on Gradescope. Collaboration and outside help (in any form) are forbidden.

1. Diagonalize the matrix $M = \begin{bmatrix} 5 & 1 & -2 \\ -3 & 1 & 2 \\ 6 & 2 & -2 \end{bmatrix}$ if possible.

2. Diagonalize the matrix $M = \begin{bmatrix} 4 & -1 \\ 1 & 2 \end{bmatrix}$ if possible.